

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P883396

Luminaire Tested: **NAV-SB3D-722-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-722-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17761 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

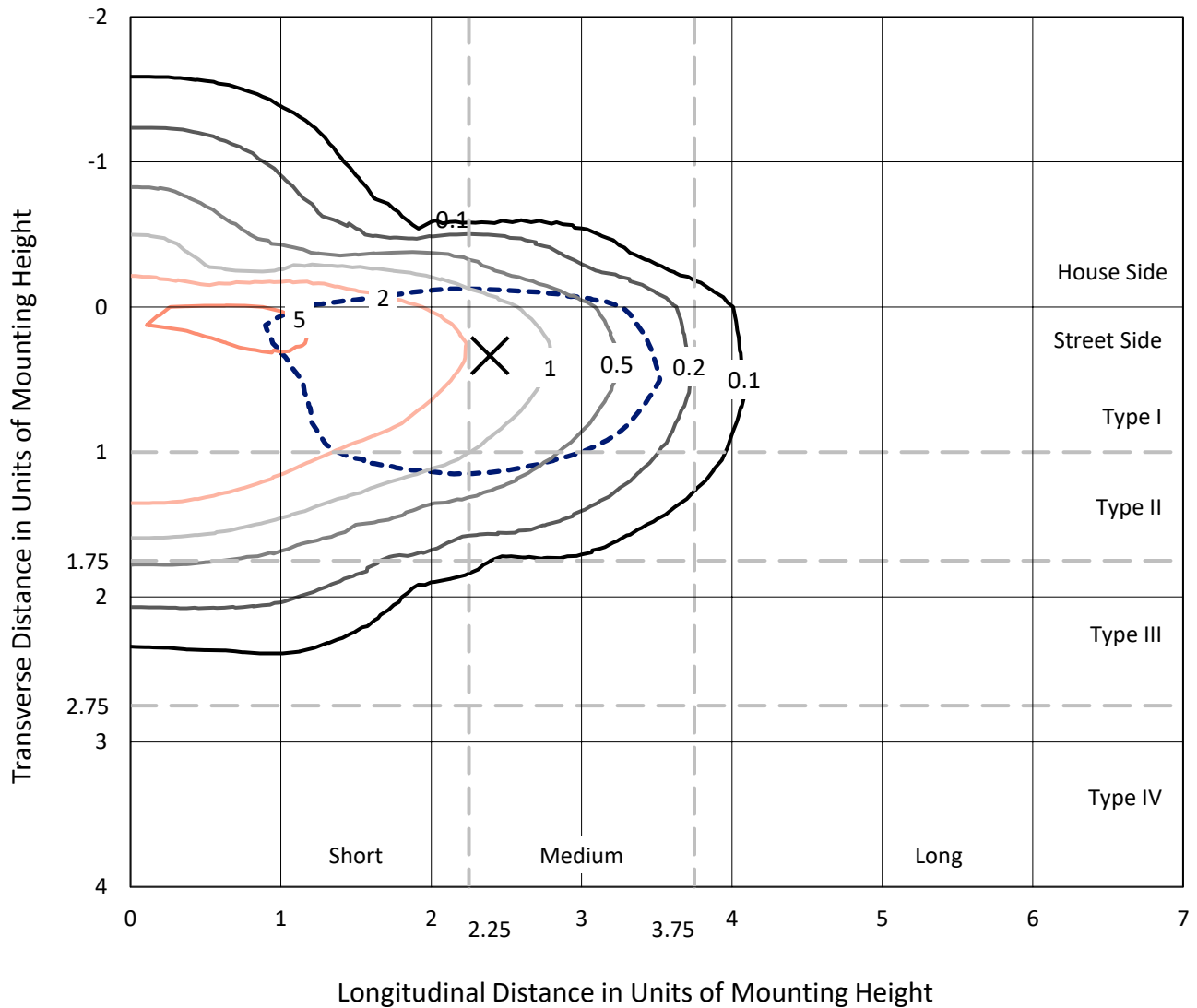
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

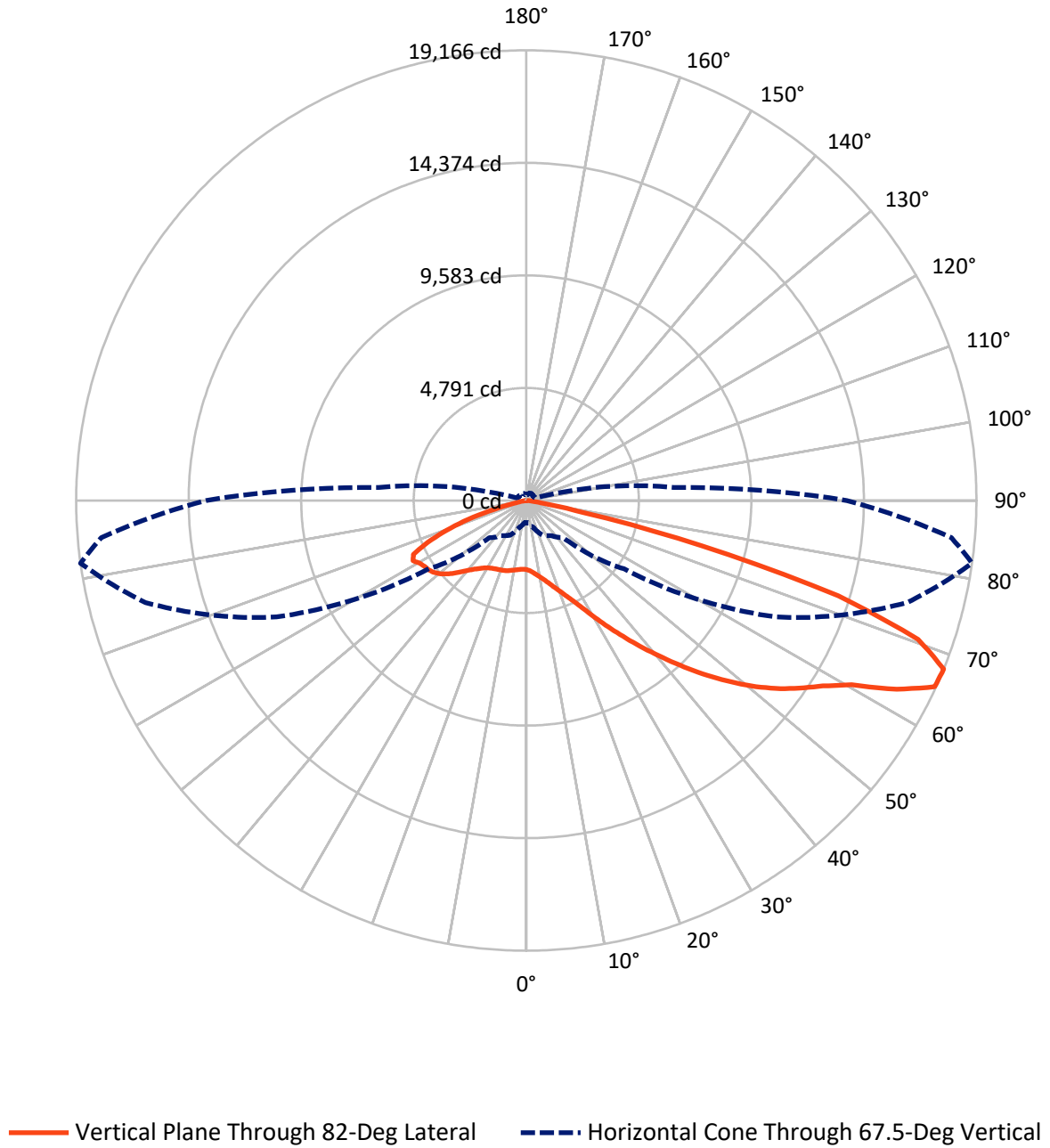
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3217.2	0.0	3217.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	14543.7	0.0	14543.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	17761.0	0.0	17761.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.1	1.5
10°-20°	681.2	3.8
20°-30°	1091.1	6.1
30°-40°	1929.4	10.9
40°-50°	3380.4	19.0
50°-60°	4508.6	25.4
60°-70°	4197.2	23.6
70°-80°	1610.9	9.1
80°-90°	100.1	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17761.0	100.0
0°-180°	17761.0	100.0

Coefficient of Utilization



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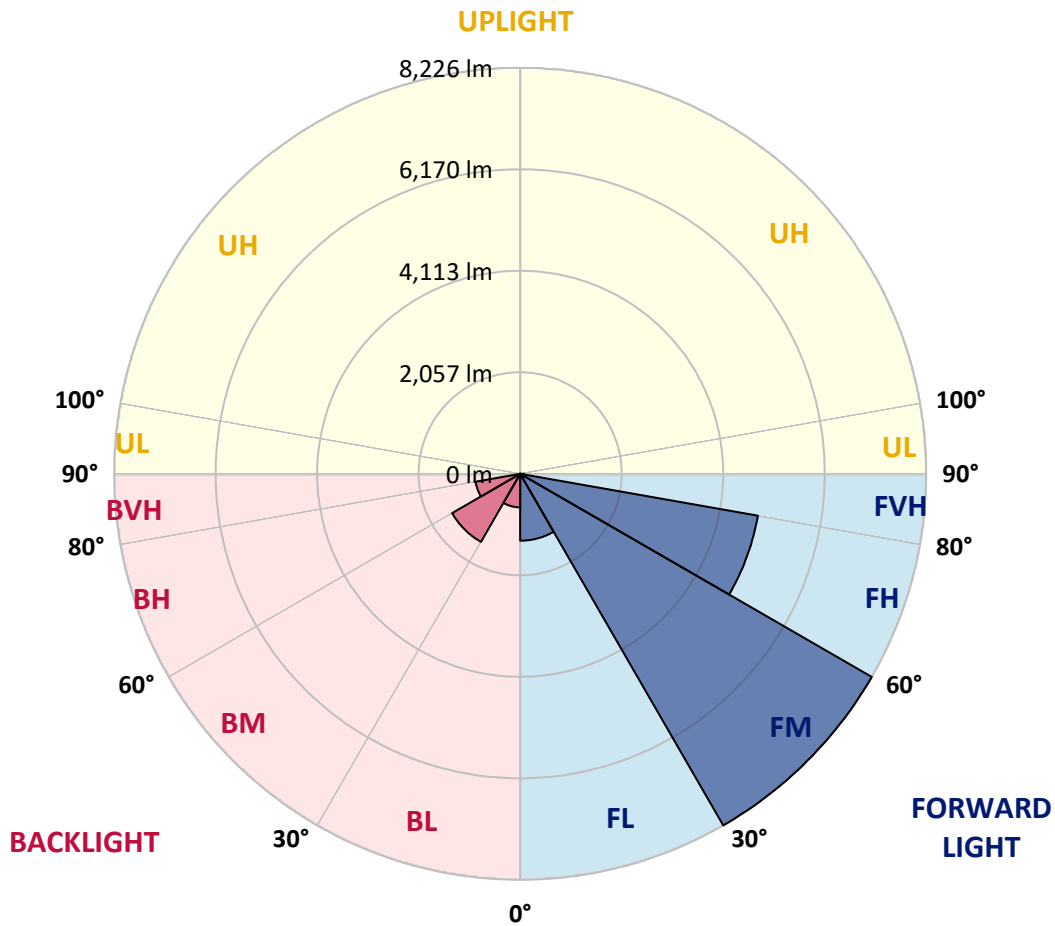
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1355.0	7.6			
FM (30°-60°)	8226.2	46.3			
FH (60°-80°)	4889.9	27.5			G2/5000
FVH (80°-90°)	72.7	0.4			G1/100
BL (0°-30°)	679.5	3.8	B2/1000		
BM (30°-60°)	1592.2	9.0	B2/2500		
BH (60°-80°)	918.3	5.2	B2/1000		G2/1000
BVH (80°-90°)	27.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4
2.5°	3109.9	3127.8	3117.6	3112.5	3103.5	3090.7	3080.5	3048.5	3015.3	2993.5	2985.9
5°	3172.6	3190.5	3189.2	3194.3	3200.7	3204.5	3202.0	3166.2	3118.9	3081.8	3060.0
7.5°	3118.9	3139.3	3155.9	3181.5	3226.3	3273.6	3296.6	3288.9	3240.3	3189.2	3162.3
10°	2966.7	2988.4	3028.1	3088.2	3182.8	3285.1	3370.8	3410.4	3379.7	3323.5	3286.4
12.5°	2687.9	2709.7	2787.7	2918.1	3076.7	3254.4	3418.1	3524.2	3531.9	3475.6	3432.2
15°	2374.6	2396.4	2479.5	2643.2	2884.9	3170.0	3443.7	3644.4	3712.2	3663.6	3611.2
17.5°	2180.3	2199.4	2262.1	2393.8	2645.7	3001.2	3434.7	3772.3	3927.0	3888.7	3826.0
20°	2121.4	2138.1	2167.5	2259.5	2469.3	2826.0	3375.9	3892.5	4158.5	4136.7	4066.4
22.5°	2184.1	2199.4	2208.4	2249.3	2381.0	2710.9	3301.7	4015.3	4427.0	4429.6	4343.9
25°	2328.6	2343.9	2333.7	2359.3	2416.8	2675.1	3273.6	4159.8	4764.6	4792.7	4695.6
27.5°	2566.4	2567.7	2543.4	2542.1	2551.1	2728.8	3303.0	4314.5	5190.4	5242.9	5122.7
30°	3043.4	3024.2	2930.9	2829.9	2783.8	2890.0	3384.8	4497.4	5693.0	5786.3	5635.4
32.5°	3778.7	3750.6	3579.2	3337.5	3094.6	3149.6	3531.9	4705.8	6240.3	6409.1	6224.9
35°	4576.6	4569.0	4389.9	4030.6	3606.1	3519.1	3771.0	4979.4	6837.5	7106.0	6887.3
37.5°	5318.3	5314.5	5212.2	4788.9	4272.3	4034.4	4154.6	5337.5	7476.8	7865.6	7607.3
40°	5996.0	6007.6	5905.3	5526.7	5006.3	4695.6	4676.4	5779.9	8187.8	8692.9	8386.0
42.5°	6581.7	6594.5	6490.9	6210.9	5731.3	5427.0	5317.0	6322.1	8882.2	9581.7	9218.5
45°	6979.4	7058.7	7043.3	6819.6	6475.6	6159.7	6086.8	7002.4	9673.7	10524.1	10098.3
47.5°	7091.9	7164.8	7279.9	7310.6	7100.9	6790.1	6877.1	7822.1	10474.2	11467.8	10983.2
50°	6814.4	6882.2	7121.3	7439.7	7585.5	7489.6	7645.6	8700.6	11293.9	12409.0	11851.4
52.5°	6267.1	6336.2	6638.0	7141.8	7736.4	8038.2	8416.7	9566.3	12088.0	13300.2	12673.7
55°	5475.6	5548.5	5935.9	6506.3	7448.7	8264.5	9059.9	10430.7	12815.6	14102.0	13415.3
57.5°	4398.9	4452.6	4855.4	5653.3	6724.9	8039.5	9534.3	11374.5	13501.0	14889.7	14150.6
60°	2867.0	2914.3	3382.3	4272.3	5525.5	7287.6	9629.0	12426.9	14411.5	15914.0	15141.6
62.5°	1906.6	1938.6	2216.1	2869.5	3891.2	5843.9	9075.3	13267.0	15746.5	17696.6	16841.1
65°	1308.2	1340.1	1617.6	2072.8	2514.0	3865.7	7483.2	13155.7	16956.2	19112.2	18100.7
67.5°	933.5	960.3	1195.6	1625.3	1819.7	2245.5	5072.8	11733.8	16782.3	19165.9	18168.4
70°	668.8	684.1	878.5	1266.0	1446.3	1349.1	2820.9	8974.2	14694.1	17697.9	16784.8
72.5°	468.0	473.1	610.0	964.2	1164.9	984.6	1342.7	5983.3	11113.6	13891.0	13012.5
75°	317.1	323.5	410.5	707.1	934.8	751.9	711.0	3208.4	6524.2	7689.1	6892.4
77.5°	194.4	196.9	264.7	483.4	699.5	572.9	457.8	1359.3	2524.2	2478.2	2112.5
80°	110.0	110.0	168.8	300.5	477.0	369.6	321.0	578.0	799.2	702.0	618.9
82.5°	61.4	62.7	122.8	186.7	315.9	218.7	176.5	267.3	345.3	305.6	266.0
85°	25.6	28.1	75.4	88.2	150.9	108.7	71.6	112.5	127.9	113.8	83.1
87.5°	2.6	3.8	23.0	16.6	17.9	21.7	10.2	21.7	17.9	17.9	12.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4	2942.4
2.5°	2961.6	2942.4	2893.8	2837.5	2763.4	2727.6	2679.0	2645.7	2617.6	2620.2	2594.6
5°	3019.1	2970.5	2861.8	2726.3	2557.5	2437.3	2309.4	2221.2	2149.6	2134.2	2099.7
7.5°	3098.4	3021.7	2831.1	2586.9	2301.7	2085.6	1892.5	1768.5	1680.3	1652.1	1624.0
10°	3200.7	3089.5	2791.5	2411.7	2001.2	1726.3	1519.2	1422.0	1361.9	1341.4	1326.1
12.5°	3319.6	3167.5	2739.1	2198.2	1691.8	1427.1	1295.4	1246.8	1227.6	1221.2	1217.4
15°	3469.2	3264.6	2659.8	1945.0	1429.6	1244.2	1188.0	1181.6	1184.1	1181.6	1180.3
17.5°	3647.0	3370.8	2530.6	1684.1	1253.2	1150.9	1130.4	1135.5	1141.9	1140.6	1138.1
20°	3841.4	3475.6	2365.7	1452.7	1133.0	1084.4	1072.9	1078.0	1083.1	1080.5	1079.3
22.5°	4062.6	3588.2	2182.8	1272.4	1052.4	1023.0	1010.2	1011.5	1011.5	1006.4	1003.8
25°	4327.3	3712.2	1991.0	1144.5	991.0	968.0	952.7	947.6	939.9	924.5	922.0
27.5°	4643.1	3843.9	1806.9	1055.0	942.4	920.7	902.8	890.0	870.8	845.3	842.7
30°	4998.6	4003.8	1650.9	998.7	904.1	882.3	861.9	842.7	814.6	782.6	780.0
32.5°	5416.8	4175.1	1537.1	961.6	869.5	846.5	822.2	799.2	768.5	736.6	737.8
35°	5915.5	4382.3	1470.6	936.0	842.7	812.0	785.2	759.6	736.6	708.4	705.9
37.5°	6456.4	4602.2	1450.1	923.3	824.8	777.5	746.8	728.9	726.3	709.7	708.4
40°	7048.5	4863.1	1465.4	915.6	805.6	744.2	711.0	707.1	713.5	684.1	685.4
42.5°	7675.0	5172.5	1491.0	906.6	778.8	711.0	679.0	679.0	673.9	633.0	633.0
45°	8352.8	5529.3	1516.6	884.9	746.8	677.7	653.4	644.5	622.7	583.1	581.8
47.5°	9035.6	5892.5	1535.8	845.3	708.4	649.6	627.9	607.4	575.4	539.6	538.4
50°	9684.0	6218.5	1515.3	786.4	664.9	622.7	599.7	571.6	537.1	512.8	508.9
52.5°	10263.2	6501.1	1428.4	717.4	618.9	594.6	574.2	544.7	516.6	491.0	488.5
55°	10767.0	6730.0	1274.9	652.2	578.0	570.3	549.9	512.8	474.4	452.7	450.1
57.5°	11250.4	6904.0	1083.1	598.5	540.9	543.5	512.8	479.5	443.7	420.7	418.2
60°	11893.6	7136.7	888.7	548.6	501.3	508.9	475.7	451.4	406.6	377.2	373.4
62.5°	12921.7	7498.6	705.9	487.2	455.2	457.8	443.7	414.3	360.6	326.1	323.5
65°	13737.6	7365.6	556.3	420.7	402.8	406.6	406.6	374.7	317.1	277.5	273.7
67.5°	13645.5	6306.8	443.7	355.5	352.9	355.5	364.4	337.6	281.3	249.4	244.2
70°	12570.1	5016.5	355.5	295.4	306.9	300.5	326.1	308.2	253.2	221.2	217.4
72.5°	10256.8	3613.7	271.1	244.2	235.3	245.5	294.1	277.5	211.0	175.2	171.4
75°	5993.5	1928.4	202.0	193.1	170.1	204.6	260.9	236.6	161.1	129.2	125.3
77.5°	1951.4	672.6	148.3	141.9	126.6	165.0	222.5	199.5	131.7	102.3	98.5
80°	523.0	203.3	101.0	93.3	81.8	122.8	176.5	158.6	94.6	66.5	65.2
82.5°	209.7	85.7	58.8	52.4	44.8	84.4	139.4	127.9	70.3	42.2	42.2
85°	67.8	28.1	21.7	16.6	20.5	52.4	83.1	87.0	49.9	21.7	16.6
87.5°	9.0	3.8	3.8	5.1	3.8	9.0	25.6	24.3	14.1	2.6	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)